



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/045,391	11/09/2001	Sheng-Shing Li	PP/1-22278/P5/CGC 2069	2361

7590 02/09/2006

Patent Department
Ciba Specialty Chemicals Corporation
540 White Plains Road
P.O. Box 2005
Tarrytown, NY 10591-9005

EXAMINER

BOYD, JENNIFER A

ART UNIT	PAPER NUMBER
----------	--------------

1771

DATE MAILED: 02/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/045,391

Applicant(s)

LI ET AL.

Examiner

Jennifer A. Boyd

Art Unit

1771

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 2, 7 - 12, 17 - 19 and 25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 7 - 12, 17 - 19 and 25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on November 23, 2005 has been entered. The Applicant's Amendments and Accompanying Remarks, filed November 23, 2005, have been entered and have been carefully considered. Claim 1 is amended, claims 22 – 24 are cancelled and claims 1, 2, 7 – 12, 17 – 19 and 25 are pending. In view of Applicant's amendment to claim 1 requiring that $x = 2$ or 3 and R_1 is a straight or branched chain alkyl of 28, 30 or 32 carbon atoms in formula (Ia), the Examiner withdraws all the previously set forth rejections as detailed in the previous Office Action. It should be noted that Tsai et al. is no longer applicable because Tsai teaches the use of a wetting agent with a formula similar to Applicant's claim 1 but where $x = 4$ or greater. Furthermore, Tsai teaches the use of UNITHOX 480 and UNITHOX 750, which do not meet the limitations of newly amended claim 1. Despite these advances, the invention as currently claimed is not found to be patentable for reasons herein below.

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Double Patenting

Art Unit: 1771

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 1 – 2 and 7 – 8 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1 – 2 and 5 of U.S. Patent No. 6,784,235 in view of US 6,239,047.

Gupta is directed to a polyolefin film composition with permanent antifog properties (Title). Gupta teaches a polyolefin film having incorporated therein a composition with the formula $\text{CH}_3\text{CH}_2(\text{CH}_2\text{CH}_2)_a\text{CH}_2\text{CH}_2(\text{OCH}_2\text{CH}_2)_b\text{OH}_m$ wherein a is 9 – 25 and b is 1 – 10 (Abstract). Claim 1 of Gupta specifically requires that a is 12, 13 or 14 and b is 2 or 3, which meets Applicant’s claim 1. In claim 2, Gupta teaches that the film can comprise polyethylene or polypropylene (column 4, lines 1 – 15) as required by Applicant’s claim 2. In claim 5, Gupta teaches that the component is present in the amount of 0.1% to 4% which overlaps with Applicant’s claims 7 – 8.

Gupta fails to teach that the polymer composition may be made into a fiber or filament instead of a film as required by Applicant's claim 1.

Erdos teaches a melt-extrudable thermoplastic based composition which when extruded into films, fibers, nonwoven fabrics or composites, results in a material or nonwoven fabric which exhibits durable wettability (column 1, lines 5 – 10). Erdos teaches that the polyolefin melt blend comprising a surfactant is useful in a wide range of applications including films and fibers. Erdos teaches that the fibers can comprise single component fibers and bicomponent fibers (column 5, lines 1 – 20). Erdos teaches that the fibers can be incorporated into nonwoven fabrics useful in sanitary articles such as diapers, hygiene products and incontinence care products (column 1, lines 10 – 20). Erdos teaches that the fabrics also are useful for wet and dry wipes, filter media, battery separators and the like (column 3, lines 1 – 10).

It would have been obvious to one of ordinary skill in the art to use the polymer composition of the film in Gupta to create fibers as suggested by Erdos motivated by the desire to expand the number of end-uses of the surfactant-containing polymer composition.

Claim Rejections - 35 USC § 103

5. Claims 1 – 2, 7 – 12, 17 – 19 and 25 are rejected under 35 U.S.C. 103(a) as being obvious over Gupta et al. (US 6,784,235) in view of Erdos et al. (US 6,239,047).

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the

Art Unit: 1771

inventor of this application and is thus not an invention “by another”; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). This rejection might also be overcome by showing that the reference is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under 35 U.S.C. 103(a). See MPEP § 706.02(l)(1) and § 706.02(l)(2).

Gupta is directed to a polyolefin film composition with permanent antifog properties (Title).

As to claim 1, Gupta teaches a polyolefin film having incorporated therein a composition with the formula $\text{CH}_3\text{CH}_2(\text{CH}_2\text{CH}_2)_a\text{CH}_2\text{CH}_2(\text{OCH}_2\text{CH}_2)_b\text{OH}_m$ wherein a is 9 – 25 and b is 1 – 10 (Abstract). Claim 1 of Gupta specifically requires that a is 12, 13 or 14 and b is 2 or 3, which meets Applicant’s claim 1.

As to claim 2, Gupta teaches that the film can comprise polyethylene or polypropylene (column 4, lines 1 – 15).

As to claims 7 – 8, Gupta teaches that the polymer formulations contain about 0.1 – 4% by weight of the composition (column 6, lines 1 – 5).

As to claims 18 – 19, Gupta teaches that the film can additionally comprise ATMER 502 (column 6, lines 1 – 15), which according to Applicant’s Specification is a 2 mole ethoxylated stearyl alcohol.

Art Unit: 1771

As to claim 25, Gupta teaches that the polymer blend may additionally contain light stabilizers and UV absorbers (columns 8 – 10).

Gupta fails to teach that the polymer composition may be made into a fiber or filament instead of a film as required by claim 1. Gupta fails to teach that the polymer composition may be incorporated into a bi-component fiber as required by claim 9. Gupta fails to teach that the polymer composition may be incorporated into a woven or nonwoven fabric as required by claims 10 – 11. Gupta fails to teach that the polymer composition may be incorporated into a woven or non-woven fabric comprising bicomponent fibers as required by claim 12. Gupta fails to teach that the polymer composition can be used in a product such as a disposable diaper, training pants, tampons, incontinence care products, wet and dry wipes, wound dressings, surgical capes, filter media and battery separators as required by claim 17.

Erdos teaches a melt-extrudable thermoplastic based composition which when extruded into films, fibers, nonwoven fabrics or composites, results in a material or nonwoven fabric which exhibits durable wettability (column 1, lines 5 – 10). Erdos teaches that the polyolefin melt blend comprising a surfactant is useful in a wide range of applications including films and fibers. Erdos teaches that the fibers can comprise single component fibers and bicomponent fibers (column 5, lines 1 – 20). Erdos teaches that the fibers can be incorporated into nonwoven fabrics useful in sanitary articles such as diapers, hygiene products and incontinence care products (column 1, lines 10 – 20). Erdos teaches that the fabrics also are useful for wet and dry wipes, filter media, battery separators and the like (column 3, lines 1 – 10).

It would have been obvious to one of ordinary skill in the art to use the polymer composition of the film in Gupta to create fibers and nonwoven fabrics for use in a wide variety of applications such as sanitary articles as suggested by Erdos motivated by the desire to expand the number of end-uses of the surfactant-containing polymer composition.

Response to Arguments

6. Applicant's arguments with respect to claims 1, 2, 7 – 12, 17 – 19 and 25 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Petrea et al. (EP 547,846 A1) is directed to a finish for textile fibers (Title). Petrea teaches that the finish comprises 70 – 95 parts by weight of polyalphaolefin oil and 5 – 30 parts by weight of an emulsifier (Abstract). The emulsifier can comprise a branched alcohol having at least two aliphatic chains of $C_4 - C_{32}$ and from 12 to 36 total carbon atoms which have been alkoxylated with from 3 – 20 moles of alkylene oxides such as ethylene oxide (page 3, lines 30 – 40). Petrea teaches that the finish can be applied to various fiber types such as polyolefins including polypropylene and polyethylene (page 4, lines 15 – 25). Petrea fails to teach incorporating the surfactant into the melt blend. Petrea actually teaches away from incorporating it permanently (i.e. melt blend) because the finish desirably is removed after fiber processing.

Art Unit: 1771

Lombardi et al. (US 6,070,107) is directed to a water soluble rapid prototyping support and mold material (Title). Lombardi teaches the use of UNITHOX 420 (the composition of Applicant's instant claim 1) in a PEG plasticized PEO filament to create a fiber with low tackiness (column 8, lines 1 – 30). Lombardi does not teach incorporating UNITHOX 420 into a *polyolefin* fiber.

“Unilin Alcohols,” Technical Release, Petrolite Specialty Polymers Group (1985) discusses ethoxylated Unilin alcohols which have the same general formula as Applicant's instant claim 1. The Technical Release discusses using this alcohol for various applications including textile finishes. The Technical Release does not teach the specific structure of claim 1.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer A. Boyd whose telephone number is 571-272-1473. The examiner can normally be reached on Monday thru Friday (8:30am - 6:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jennifer Boyd
2/3/08


TERREL MORRIS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700